

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A temperature control system in a thermal device,  
comprising: equipped with  
an electrical supply network,  
a frequency converter connected to the electrical supply network by a  
disconnecting device,  
a temperature sensor,  
resistance heating elements connected to an output of the frequency converter  
by a first contactor, and  
a motor-driven cooling gas blower connected to the output of the frequency  
converter by a second contactor,  
a temperature controller on which both of the latter connected through  
contactors to the output of a frequency converter supplied from electrical supply network  
through a disconnecting device, with temperature progress in a thermal process for the  
thermal device is programmed and on a temperature controller which controls the frequency  
converter, **unique in that**  
wherein the frequency converter modulates effective voltage supplied to the  
resistance heating elements and supplied to the motor-driven cooling gas blower,  
wherein the output of the frequency converter (F) is simultaneously connected  
through the first contactor (SG) to at least one heating system incorporating that includes the  
resistance heating elements, and through the second contactor (SD) to at least one cooling  
system with that includes the blower and a blower 3-phases induction motor (MD), and

wherein the first and second contactors (SG and SD) being are controlled by the temperature controller (RT).

2. (Currently Amended) Temperature The temperature control system as per according to claim 1, unique in that further comprising a transformer between the first contactor (SG) of the heating system and the resistance heating elements (R) there is a transformer (TR).

3. (Currently Amended) Temperature The temperature control system as per according to claim 1, unique in that further comprising a transformer between the second contactor (SD) of the blower and the blower motor (MD) there is a transformer (TRD).

4. (Currently Amended) Temperature The temperature control system as per according to claim 1, unique in that it is most advantageous to have the wherein a rated current of the heating and cooling systems maintain the maintains a ratio of 0.33 – 3.

5. (Currently Amended) Temperature The temperature control system as per according to claim 1, unique in that it is most advantageous to have the wherein a rated voltage of the heating and cooling systems maintain the maintains a ratio of 0.33 – 3.